



## Streptavidin

| Cat. No. | Format                        | Size   |
|----------|-------------------------------|--------|
| 7105-01  | Purified (UNLB)               | 5.0 mg |
| 7105-01S | Purified (UNLB)               | 0.5 mg |
| 7105-02  | Fluorescein (FITC)            | 1.0 mg |
| 7105-02S | Fluorescein (FITC)            | 0.5 mg |
| 7105-03  | Rhodamine (TRITC)             | 1.0 mg |
| 7105-04  | Alkaline Phosphatase (AP)     | 1.0 mL |
| 7105-05  | Horseradish Peroxidase (HRP)  | 1.0 mL |
| 7105-06  | $\beta$ -galactosidase (BGAL) | 1.0 mL |
| 7105-07  | Texas Red <sup>®</sup> (TXRD) | 1.0 mg |
| 7105-09L | R-phycoerythrin (PE)          | 1.0 mg |
| 7105-09M | R-phycoerythrin (PE)          | 0.5 mg |
| 7105-09S | R-phycoerythrin (PE)          | 0.1 mg |

| Cat. No. | Format                                           | Size   |
|----------|--------------------------------------------------|--------|
| 7105-10  | R-phycoerythrin-Texas Red <sup>®</sup> (PE/TXRD) | 0.1 mg |
| 7105-11L | Allophycocyanin (APC)                            | 1.0 mg |
| 7105-11M | Allophycocyanin (APC)                            | 0.5 mg |
| 7105-11S | Allophycocyanin (APC)                            | 0.1 mg |
| 7105-12  | Cyanine 3 (CY3)                                  | 0.1 mg |
| 7105-13L | Spectral Red <sup>®</sup> (SPRD)                 | 0.5 mg |
| 7105-13S | Spectral Red <sup>®</sup> (SPRD)                 | 0.1 mg |
| 7105-15  | Cyanine 5 (CY5)                                  | 1.0 mg |
| 7105-17L | R-phycoerythrin-Cyanine 7 (PE/CY7)               | 0.5 mg |
| 7105-17S | R-phycoerythrin-Cyanine 7 (PE/CY7)               | 0.1 mg |
| 7105-19L | Allophycocyanin-Cyanine 7 (APC/CY7)              | 0.5 mg |
| 7105-19S | Allophycocyanin-Cyanine 7 (APC/CY7)              | 0.1 mg |

## Description

|                    |                |
|--------------------|----------------|
| <b>Specificity</b> | Biotin         |
| <b>Source</b>      | <i>E. coli</i> |

## Applications

Quality tested applications include –

ELISA <sup>1-11</sup>  
 FLISA  
 FC <sup>12,13</sup>

Other referenced applications include –

ELISPOT <sup>14-17</sup>  
 IHC-FS <sup>21</sup>  
 IHC-PS <sup>18</sup>  
 ICC <sup>21</sup>  
 WB <sup>8,11</sup>  
 Multiplex <sup>19,20</sup>

## Working Dilutions

|                           |                                                                                                                                        |                                            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| <b>Flow Cytometry</b>     | FITC and CY3 conjugates                                                                                                                | $\leq 1 \mu\text{g}/10^6 \text{ cells}$    |
|                           | PE, PE/TXRD, and CY5 conjugates                                                                                                        | $\leq 0.2 \mu\text{g}/10^6 \text{ cells}$  |
|                           | APC, SPRD, and APC/CY7 conjugates                                                                                                      | $\leq 0.1 \mu\text{g}/10^6 \text{ cells}$  |
|                           | PE/CY7 conjugate                                                                                                                       | $\leq 0.01 \mu\text{g}/10^6 \text{ cells}$ |
|                           | For flow cytometry, the suggested use of these reagents is in a final volume of 100 $\mu\text{L}$                                      |                                            |
| <b>FLISA</b>              | FITC, TRITC, TXRD, and CY3 conjugates                                                                                                  | 1:100 – 1:400                              |
|                           | PE, APC, and CY5 conjugates                                                                                                            | $\leq 1 \mu\text{g}/\text{mL}$             |
| <b>ELISA</b>              | AP conjugate                                                                                                                           | 1:2,000 – 1:4,000                          |
|                           | HRP conjugate                                                                                                                          | 1:4,000 – 1:8,000                          |
|                           | BGAL conjugate                                                                                                                         | 1:500                                      |
| <b>Other Applications</b> | Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need. |                                            |

**For Research Use Only. Not for Diagnostic or Therapeutic Use.**

## Handling and Storage

- The purified (UNLB) streptavidin is supplied as 5.0 mg protein in 1.0 mL or 0.5 mg in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 0.5 mL or 1.0 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The rhodamine (TRITC), Texas Red® (TXRD), and Cyanine 5 (CY5) conjugates are supplied as 1.0 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The alkaline phosphatase (AP) conjugate is supplied as 1.0 mL in a stock solution of 50 mM Tris/1 mM MgCl<sub>2</sub>/50% glycerol, pH 8.0, containing NaN<sub>3</sub> as preservative. Store at 2-8°C or long-term at -20°C.
- The horseradish peroxidase (HRP) conjugate is supplied as 1.0 mL in a stock solution of 50% glycerol/50% PBS, pH 7.4. *No preservative added.* Store at 2-8°C or long-term at -20°C.
- The β-galactosidase (BGAL) conjugate is supplied as 1.0 mL in a stock solution of 50% glycerol/50% PBS containing NaN<sub>3</sub> as preservative. Store at 2-8°C or long-term at -20°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied 1.0 mg in 2.0 mL, 0.5 mg in 1.0 mL, or 0.1 mg in 0.2 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Cyanine 3 (CY3) conjugate is supplied as 0.1 mg in 0.2 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The R-phycoerythrin/Texas Red® (PE/TXRD) conjugate is supplied as 0.1 mg in 0.2 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. **Do not freeze!**
- The Spectral Red® (SPRD), R-phycoerythrin-Cyanine 7 (PE/CY7), and allophycocyanin-Cyanine 7 (APC/CY7) conjugates are supplied as 0.5 mg in 1.0 mL or 0.1 mg in 0.2 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

## Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

## References

1. Pohlmeier L, Sonar SS, Rodewald H, Kopf M, Tortola L. Comparative analysis of the role of mast cells in murine asthma models using Kit-sufficient mast cell-deficient animals. *Allergy*. 2021;76:2030-43. (ELISA)
2. Honjo K, Russell RM, Li R, Liu W, Stoltz R, Tabengwa EM, et al. Convalescent plasma-mediated resolution of COVID-19 in a patient with humoral immunodeficiency. *Cell Rep Med*. 2020;2:100164. (ELISA)
3. Hayuningtyas RA, Han M, Choi S, Kwak MS, Park IH, Lee J, et al. The collagen structure of C1q induces wound healing by engaging discoidin domain receptor 2. *Mol Med*. 2021;27:125. (ELISA)
4. Afkhami S, D'Agostino MR, Zhang A, Stacey HD, Marzok A, Kang A, et al. Respiratory mucosal delivery of next-generation COVID-19 vaccine provides robust protection against both ancestral and variant strains of SARS-CoV-2. *Cell*. 2022;185:896-915. (ELISA)
5. Myzithras M, Lin S, Radden L, Hess Kenny C, Cai Z, MacDonald A, et al. Development of novel ultra-sensitive IL-11 target engagement assays to support mechanistic PK/PD modeling for an anti-IL-11 antibody therapeutic. *Mabs*. 2022;14:2104153. (ELISA)
6. Ekanger CT, Zhou F, Bohan D, Lotsberg ML, Ramnefjell M, Hoareau L, et al. Human organotypic airway and lung organoid cells of bronchiolar and alveolar differentiation are permissive to infection by influenza and SARS-CoV-2 respiratory virus. *Front Cell Infect*
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8. Tjarnhage E, Brown D, Bogen B, Andersen TK, Grødeland G. Trimeric, APC-targeted subunit vaccines protect mice against seasonal and pandemic influenza. *J Virol*. 2023;97:e0169422. (ELISA, WB)
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10. Remy C, Pintado E, Dunlop M, Schön S, Kleinpeter P, Rozanes H, et al. Design and selection of anti-PD-L1 single-domain antibody and tumor necrosis factor superfamily ligands for an optimal vectorization in an oncolytic virus. *Front Bioeng Biotechnol*. 2023;11:1247802. (ELISA)
11. Wei Y, Chen Q, Chen J, Zhou C, Geng S, Shi D, et al. Loss of α-1,2-mannosidase MAN1C1 promotes tumorigenesis of intrahepatic cholangiocarcinoma through enhancing CD133-FITC200 interaction. *Cell Rep*. 2023;42:113588. (ELISA, WB)
12. Liu H, Zhao Q, Tan L, Wu X, Huang R, Zuo Y, et al. Neutralizing IL-8 potentiates immune checkpoint blockade efficacy for glioma. *Cancer Cell*. 2023;41:693-710.e8. (FC)
13. Smith ES, Balch LA, Scrivens M, Shi S, Wang W, Harvey CD, et al. Use of poxvirus display to select antibodies specific for complex membrane antigens. *Mabs*. 2023;15:2249947. (FC)
14. Dagotto G, Ventura JD, Martinez DR, Anioke T, Chung BS, Siamatu M, et al. Immunogenicity and protective efficacy of a rhesus adenoviral vaccine targeting conserved COVID-19 replication transcription complex. *NPJ Vaccines*. 2022;7:125. (ELISpot)
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21. SouthernBiotech unpublished data (IHC-FS, ICC)

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Spectral Red® is a PE/CY5 tandem conjugate.

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